



KRAISSL QUARTERLY

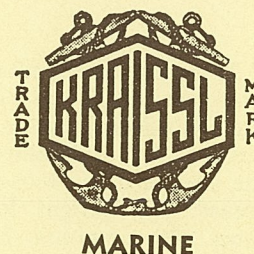
Published By

THE KRAISSL COMPANY

INCORPORATED

PUMPS-SEPARATORS-ENGINEERING EQUIPMENT

HACKENSACK, NEW JERSEY



Volume 24

JULY 1980

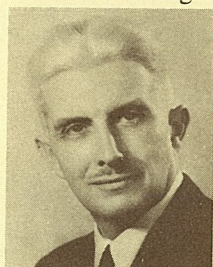
Number 3

A POLICY OF PEACE THROUGH STRENGTH

FREDERICK KRAISSL, JR., P.E.

Chairman

The Kraissl Company, Inc.



CONSULTING
ENGINEER

KRAISSL ASSOCIATES

While never subscribing to a policy of Peace Through Weakness, it remained for the American Security Council to organize the Coalition of Peace Through Strength. This should be the cornerstone of our foreign policy and seminars conducted by the American Security Council should be a prerequisite for a career in United States politics.

Weakness is an invitation to exploitation and should never be confused with the role of Peacemaker. Only the strong have the capability to enforce peace if it cannot be negotiated, which should be the desirable approach. There will always be conflicts of interests between individuals, states, and nations and there will be options of courses to be followed. War should be made such an unattractive option that no nation will find it an acceptable procedure. Logic should indicate that this can only be a safeguard if the cost of attacking another nation would be unattractive.

Much can be learned from nature. Consider the skunk. Members of this family are not physically powerful compared to potential predators but are usually left unmolested. Even human beings prefer not to tangle with a skunk. I remember an incident that is illustrative. I was motoring along a well travelled highway when a large skunk emerged into the highway with plenty of time for me to stop which I did. A motorcycle officer came up to question why I was holding up traffic so I simply pointed. He confirmed the need, stopped traffic and steadied his motorcycle alongside my car and we waited. When the skunk had decided that all traffic had been stopped she gave some form of signal and five little skunks emerged from the under-

growth. After they had crossed the road, the traffic officer gave the signal and the twentieth century went back into action.

Nobody got hurt, no property was damaged, not even a stench had to be endured, and the mother skunk led her family peacefully to its destination. This was a good example of the application of Peace Through Strength. The skunk's chemical warfare capability was never doubted so it did not need to be employed.

Motivation should be the keynote to the evaluation of international intent. If it is obscure there are national agencies for determining the intent of others with great accuracy. However, when an individual in a position to impose his will on a nation writes a book such as *Mein Kampf*, it is ridiculous to ignore it which many countries did, including ours, to their great cost. So when another powerful nation states frankly that its motive is to "Bury Us," it is equally ridiculous to take no heed.

So what is wrong in following the example of Mr. and Mrs. Skunk. Let's build our defenses so strong and so repugnant to be encountered, that one look would convince a predator nation that it would be most undesirable to attack us or molest our citizens and just perhaps we would be left in peace to attempt to solve our economic problems and those posed by developing nations who seek our help.

A SMALL PERSONNEL BRIT PROTECTION UNIT DESIGN PATENT NO. 197,55A

Many of you know that my last military assignment at the close of WW II was as Chief of the Plant Protection Section, OCD which was carried on by military personnel.

After World War II was ended there came a period when defense considerations were abandoned or greatly limited on the theory that we had concluded a war to end all wars. That this is a fantasy can be appreciated in retrospect but at the moment we are discussing causes and effects.

The potency of atomic weapons caused subsequent concern and to allay mass apprehension, various structures were designated shelters. It has been

my opinion in deference to my respect for the intelligence of the originators, that these were psychological shelters rather than places of adequate protection.

Possibly to satisfy an urge to make use of my cumulative experience in this field and to provide an alternative to having no control over the use of atomic weapons against us, I designed and got a design patent on a small shelter unit. I offered it to the War Department but found no interest. Nobody wanted to think about the need for such an installation. We were going to negotiate to make atomic warfare impossible. It was never my intent to monopolize this design but possibly there was a thought that I might be given credit for having originated something worthwhile.

Since it now appears that the Salt Agreements together with Detente have been used as tools to lull us into complacency, while the drive to control the world has been carried on with, if anything, accelerating potency, it is possible that the idea may be conceded that we might wish as small groups to protect ourselves against possible atomic attack.

With this thought in mind the following design statistics are submitted with the thought these designs may be used either as shown or modified without responsibility on my part that there is any design product liability as they obviously have not been tested, and it is hoped that product liability will never be considered to apply when products or structures cannot be tested under operating conditions. Also this is a gift to this generation without any compensation or hope of economic benefit. With this stipulation these designs are open to use if groups or individuals are willing to suffer the gibes that Noah was subjected to when he built the Ark. The difference, of course, is the fact that the specifications for the Ark were given by the Almighty who wanted the inhabitants of the Ark to survive so the only point of likeness is the probability of the gibes of onlookers.

Let's start off by admitting that if even such a shelter were subjected to point zero atomic detonation, that no claim for survival would be offered.

However, with limited atomic attack everyone would not be at point zero. As the distance from this point increases, the probability of survival of the structure and those in it would increase. All designs for any purpose must take economic factors into consideration. At the time of the design, a reinforced concrete pipe manufacturer was consulted and the diameter and size of the circular chambers were found feasible.

The word BRIT needs explanation. B stands for Blast; R for Direct Radiation; I for Indirect Radiation and T for Thermal Protection. At the time, a reasonable protection was considered three feet of earth in the form of sand. It will be noted that the emergency exits are filled with sand with vertical means of ascending. It was expected that the bottom of this exit would be unsecured, the sand dropped, when the emergency exit was used.

KA 1002 shows the schematic assembly. KA-1001A is the key to the arrangements; KA1001B gives some suggested dimensions and KA-1003 an assembly for a family. Some obvious questions can be answered. It is possible to have a well serviced by a pump with either a gasoline engine with outside one way exhaust or hand power arrangement. I built a hand powered rotary pump that supplied water under pressure from a well so I know it can be done. A cesspool or septic tank could meet the need for sewage disposal. It will be noted that the reinforced corridor walls are integrated with the reinforced concrete circular chambers, but in the event they are crushed there could be dig out escape ports in the opposite end. The circular chambers could accommodate four bunks each, two uppers and lowers. Hot food and beverage could be supplied by camp equipment varying from alcohol stoves to sterno units. It is possible water for a limited period could be in plastic gallon containers. No outside air intake is shown although, there is a hand operated blower if desired for air circulation. The reason for no outside air intake is the contamination by radiation particles. Materials have been developed for the absorption of exhaled air components and the supply of breathable air. Space craft require this and atomic submarines that travel for long times submerged. The general manager of a chemical company that was a supplier had an underground unit constructed and stayed down approximately a week to test it. He was on an air pollution abatement commission with me and I had the preliminary facts direct from

him. The information at that time was classified but it may be available from current civil defense authorities.

Gas masks and protective clothing would be needed to test emergence. Entrance doors might need to be secured against previous scoffers who would probably use all measures to gain admittance disregarding overcrowding. After the first blast they might be eliminated.

It was estimated a week underground after an atomic attack might be needed before air could be safely breathed but means for checking could be provided. Only the young and hardy could hope to survive but there were survivors of Nagasaki and Hiroshima as a precedent. It would take those of indomitable will and perseverance but these would be desirable progenitors of a successor race if the military could defend the country.

Undoubtedly the horror of atomic warfare inspired the Mutual Air Destruction philosophy but it is reported that a potential adversary has made provision for underground personnel shelters and essential industries so that perpetuation of existence has been evaluated and provision made to accomplish it.

The will to survive must be present as well as the means of accomplishment. There would be no place for weaklings or those who would bemoan the luxuries of the past.

However, if this will to survive can be regenerated, our defenses could be rebuilt so that a potential adversary might be convinced our conquest would be no easy matter and this horror could be avoided. Individual shelters might be justified, if only to be convincing of the will to survive, as a deterrent. A possible answer to scoffers might be that this is the point of retreat in the event of hurricanes or cyclones, especially in areas subject to this possibility which lately seems almost anywhere. Or in the meantime it might be used as a mushroom cellar which in any event is a good source of protein.

PUBLICITY FOR CUSTOMERS PRODUCTS

We have long had a policy of showing pictures of machines, devices and installations, with short write ups where our products are used as components. This has varied from ships on which our separators have been used to pump and heater sets assembled by our customers. We are sure other customers will be glad to avail themselves of this publicity but we need time to use any material supplied.

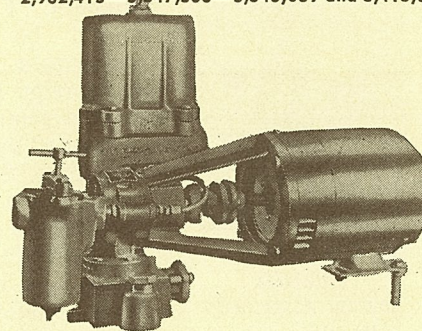
EDITORIALS

Our editors are the senior officers of this company and our policy permits each of us to express thoughts which we believe can be contributions to the voice of public opinion in business. It must be emphasized that the thoughts expressed are those of the author and not necessarily endorsed by the rest of the Board of Directors of this company. Kraissl Associates, acting in the capacity of consultants, handle the technical aspects of our public relations program.

We want this publication to be available when you are able to invite us to exchange current ideas, information and technical data without intrusion.

AIR-OIL SEPARATORS FOR AIR PUMPS

U.S. Patents 2,144,681—2,792,118—2,890,763—
2,982,413—3,347,386—3,348,689 and 3,415,041



WITH INTEGRAL AIR FILTER

To save a great deal of extra words, we have used the name of air pumps to cover both vacuum pumps and compressors. We know of course that air is a gas or rather a mixture of the two largest components of oxygen and nitrogen but we do not use the word gas pump as we believe this would introduce a possible safety hazard. Many gases are ignitable with various degrees of explosive characteristics and we wish to have potential customers raise the question of possible suitability of the use of our pumps for gases other than air so that we can point out potential hazards if they can be foreseeable.

As manufacturers, producing a standardized trade marked line under the Uniform Sales Act we have no intention of performing the function of consulting engineers who make it their professional mission to write specifications concerning equipment to meet definite requirements. However we attempt to also be careful in not using nomenclature that might lead the unwary into unwarranted assumptions.

It is normally impractical to so select a lubrication system for any application that will **exactly** supply adequate

As in all other aspects of life we must pay for what we get. To obtain the higher degree of oil elimination in our Class 26 series separators the

The next matter deals with our test procedure. All of our valves are tested by hydraulic pressure at working pressure plus fifty percent, in accordance

We just thought you would like to know the extent to which we go to supply our steel valves which should provide trouble free service under proper usage in the field.

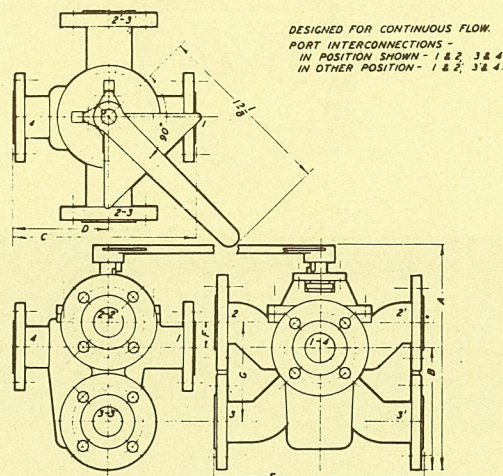


TABLE OF DIMENSIONS - INCHES										
MODEL SIZE	FLG. R.C. DIA	R.C. DIA	R.F. W/4 DIA	FLG. W/4 DIA	A	B	C'- E'- F	D	E'- F	G
150" ASA FLANGES - 230 PSIG MAX W.P.										
72-37	1 5/8	2 1/2	4	2 1/2	70	14 7/8	9 1/8	4 1/8	10	1 5/8
72-39	2	6 3/4	4	3 5/8	96	16 3/8	9 5/8	12 6/8	12	7 3/8
72-41	2 1/2	7 5/8	4	3 7/8	117	18 1/8	12 8/8	6 1/2	13	7 7/8
72-43	3	7 7/8	4	3 7/8	140	18 1/8	12 8/8	6 1/2	14	7 7/8
72-47	4	9 7/8	8	6 1/8	305	19 1/2	15 5/8	9	21	11 1/8
300" ASA FLANGES - 600 PSIG MAX W.P.										
72-37	1 5/8	2 1/2	4	2 1/2	90	15 1/8	8 7/8	4 1/8	10	1 5/8
72-39	2	6 3/4	8	3 5/8	115	16 3/8	9 1/8	12 6/8	12	7 3/8
72-41	2 1/2	7 5/8	8	3 7/8	140	18 1/8	12 8/8	6 1/2	13	7 7/8
72-43	3	8 1/8	8	5 1/8	185	17 1/8	10 1/2	6 1/8	18	8 1/8
72-47	4	10 7/8	8	6 1/8	353	20 1/8	15 5/8	9	21	11 1/8
600" ASA FLANGES - 1200 PSIG MAX W.P. (300" F MAX TEMP)										
72-37A	1 5/8	2 1/2	4	2 1/2	115	15 1/8	8 7/8	4 1/8	11	1 5/8
72-39A	2	6 3/4	8	3 5/8	150	16 3/8	9 1/8	12 6/8	12	7 3/8
72-41A	2 1/2	7 5/8	8	3 7/8	185	18 1/8	12 8/8	6 1/2	13	7 7/8
72-43A	3	8 1/8	8	5 1/8	240	17 1/8	10 1/2	6 1/8	18	8 1/8
72-47A	4	10 7/8	8	6 1/8	420	20 1/8	15 5/8	9	21	11 1/8
PLUS 1" R.F. ON 150" & 300" FLGS. & 1" R.F. ON 600" FLGS.										

EXTENDED LIFTING JACK AND VALVE STEM FOR REMOTE VALVE OPERATION

A rather unusual requirement for our duplex three-way transfer valves developed for the North Sea Mobil platforms built by Curtiss Wright Corporation, Wood-Ridge, New Jersey.

The valves furnished with lifting jacks had to be operable through an acoustically sealed partition. Rather than consider a more complicated remote control mechanism, which would have to facilitate lifting the valve plug, turning the plug, and finally reseating the plug, it was decided to extend the lifting jack mechanism together with an extended valve stem and operate the valve manually through a hole in the steel partition of the platform. A circular plate the size of this hole was built right into the valve to complete the seal after installation. Full operation of the valve, including that of the lifting jack, was thereby possible from a position outside of the acoustically sealed compartment containing the valve and other equipment. This modification is typical of what we can furnish for specified applications.

VACATION NOTICE

The Vacation Period, while never painless, was found least disturbing last year when arranged for the last week in July and first week in August. We are scheduling complete shut down during this period.



THE KRAISSL COMPANY

INCORPORATED

HACKENSACK, NEW JERSEY 07601

RETURN POSTAGE GUARANTEED



YOUR
COPY
OF

KRAISSL
QUARTERLY

SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, Metropolitan New York, including the Hudson Valley, Long Island, New Jersey and eastern Pennsylvania less Philadelphia District for coverage by Kraissl Company personnel.

Northeast Region

Boston-Cooper Corp.
Manor Parkway
Salem Ind. Pkwy., Salem, N. H. 03079

Capt. C. V. Watson
Maiden Cove Lane
Cape Elizabeth, Maine 04107

Eastern Region

Filtration Unlimited
Buffalo & John Streets
Akron, N. Y. 14001

Jobe & Co., Inc.
1815 Eaison Hwy.
Baltimore, Md. 21213

Daily Associates
8 E. Mt. Vernon Ave.
Haddonfield, N. J. 08033

Southeast Region

Power Equipment Co.
1307 West Main St.
Richmond, Va. 23201

Dillon Supply Company — Main Office
Raleigh, N. C. 27602

Dillon Supply Company
Durham, No. Carolina 27702

Dillon Supply Company
Rocky Mt., No. Carolina 27801

Dillon Supply Company
Goldsboro, No. Carolina 27530

Dillon Supply Company
Charlotte, No. Carolina 28201

Boiler Supply Company, Inc.
490 Craighead Street
Nashville, Tenn. 37204

601 Van St., N. W.
Knoxville, Tenn. 37921

Applied Engineering Co., Inc.
P. O. Box 506, Orangeburg, S. C. 29115

Spotswood Parker & Co.
721 Miami Cir. NE, Atlanta, Ga. 30324

Procter & Co.
Box 26158
Birmingham, Ala. 35226

North Central Region

Comb & Groves, Inc.
336 W. Eight Mile Rd.
Ferndale, Mich. 48220

Hetler Equipment Co.
P. O. Box 1904
Grand Rapids, Mich. 49501

Central Region

M. Huffman Sales Co.
3404 Upton Ave.
Toledo, Ohio 43613

W. G. Taylor Co.
1900 Euclid Bldg., Cleveland, Ohio 44115

The Jordan Engineering Co.

P. O. Box 30071

Cincinnati, Ohio 45230

T. A. Heidenreich Co., Inc.

2525 E. 54th Street

Indianapolis, Ind. 46220

Tobra Engineering Co.

5438 Milwaukee Ave.

Chicago, Illinois 60630

A. K. Howell Co.

2683 S. Big Bend Blvd.

St. Louis, Mo. 63143

South Central Region

Creole Engineering Co.

P. O. Box 23159, Harahan, La. 70183

Jack Tyler Engineering Co.

6112 Patterson Ave.

Little Rock, Ark. 72209

Albert Sterling & Assoc., Inc.

P. O. Box 66099, Houston, Texas 77006

Northwest Region

Baxter-Rutherford Inc.

P. O. Box 24324 Terminal Annex

Seattle, Washington 98134

Western Region

Jay Besore & Assoc.

1690 Plymouth St.

Mountain View, Cal. 94043

Power Engineering Co.

364 W. North 600th St.

Salt Lake City, Utah 84110

Killam Gas Burner Co.

1240 S. Bannock St.

Denver, Colorado 80223

Southwest Region

Wagner Hydraulic Equip. Co.

2089 Westwood Blvd.

Los Angeles, California 90025

Engineered Sales Co.

5150 N. 16th St., Suite A-126

Phoenix, Arizona 85016

Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.

7435 Chester Ave

Montreal, Quebec, Canada H4V1M4

P. O. Box 508

Knowlton, Quebec, Canada

K. C. Hamilton Equip. Ltd. — Marine

Canada—British Columbia Province

Les Hall Filter Service Ltd.

346 E. Esplanade

North Vancouver, B. C. V7L 1A4

Canada—Alberta Province

H. F. Clarke Limited

5220-1A Street S. E.

Calgary, Alberta, Canada

Hawaii

Foster Equipment Co.

719 Ahua St.

Honolulu, Hawaii 96803

Mexico

Ingenieria Termo Industrial, S. A.

Apartado 20-360

Mexico 20, D. F., Mexico

BULK RATE

U. S. POSTAGE

PAID

Permit No. 1268

Hackensack, N. J.